

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0108464

Owner: Ellis-Scott Sanitary Landfill, LLC
Address: 61 NW 850, P.O. Box 234, Clinton, MO 64093

Continuing Authority: Same as above
Address: Same as above

Facility Name: Ellis-Scott Sanitary Landfill
Address: 61 NW 850, P.O. Box 234, Clinton, MO 64093

Legal Description: Outfall #001: NW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 26, T43N, R26W, Henry County
Outfall #002: SW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 26, T43N, R26W, Henry County
Outfall #003: SE $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 26, T43N, R26W, Henry County

Receiving Stream: Fields Creek (U)
First Classified Stream and ID: Grand River (P)(01249)
USGS Basin & Sub-watershed No.: (10290108-200001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfalls #001 & #002 - Landfill - SIC #4953
Stormwater runoff.

Flow is dependent upon precipitation.

Outfall #003 - Landfill Leachate - SIC #4953

Holding basin/spray irrigation/land application is by sprayer truck only onto landfill areas underlain by leachate collection system.

Design flow is 1,100 gallons per day.

Actual flow is dependent upon precipitation.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

November 15, 2002

Effective Date


Stephen M. Mahford, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

November 14, 2007

Expiration Date
MO 780-0041 (10-93)


Jim Hull, Director of Staff, Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 6	
					PERMIT NUMBER MO-0108464	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001 & 002</u>						
Flow	MGD	*		*	once/quarter**	instantaneous estimate
Rainfall	inches	*		*	daily measurement	***
BETX	mg/L	0.75		0.75	once/quarter**	grab
Biochemical Oxygen Demand ₅	mg/L	60		45	once/quarter**	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	80		60	once/quarter**	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab
Conductivity (Specific Conductance)	micromhos /cm 25°C	*		*	once/quarter**	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter**	grab
Iron, Total Recoverable	mg/L	*		*	once/quarter**	grab
pH - Units	SU	****		****	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>April 28, 2003</u> .						
Calcium	mg/L	*		*	once/year*****	grab
Fluoride	mg/L	*		*	once/year*****	grab
Total Hardness	mg/L	*		*	once/year*****	grab
Barium, Total Recoverable	mg/L	*		*	once/year*****	grab
Boron, Total Recoverable	mg/L	*		*	once/year*****	grab
Cadmium, Total Recoverable	µg/L	*		*	once/year*****	grab
Chromium, Total Recoverable	mg/L	*		*	once/year*****	grab
Cobalt, Total Recoverable	mg/L	*		*	once/year*****	grab
Copper, Total Recoverable	mg/L	*		*	once/year*****	grab
Sodium, Total Recoverable	mg/L	*		*	once/year*****	grab
Ammonia as N	mg/L	*****		*****	once/year*****	grab
Nitrate and Nitrite as N	mg/L	*		*	once/year*****	grab
Phosphorus, Total	mg/L	*		*	once/year*****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2003</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

					PAGE NUMBER 3 of 6	
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PERMIT NUMBER MO-0108464	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001 & #002</u>						
Mercury, Total Recoverable	mg/L	*		*	once/year*****	grab
Arsenic, Total Recoverable	mg/L	*		*	once/year*****	grab
Lead, Total Recoverable	µg/L	*		*	once/year*****	grab
Selenium, Total Recoverable	mg/L	*		*	once/year*****	grab
Silver, Total Recoverable	mg/L	*		*	once/year*****	grab
Manganese, Total Recoverable	mg/L	*		*	once/year*****	grab
Magnesium, Total Recoverable	mg/L	*		*	once/year*****	grab
Zinc, Total Recoverable	µg/L	*		*	once/year*****	grab
Antimony, Total Recoverable	mg/L	*		*	once/year*****	grab
Beryllium, Total Recoverable	mg/L	*		*	once/year*****	grab
Nickel, Total Recoverable	mg/L	*		*	once/year*****	grab
Sulfate	mg/L	*		*	once/year*****	grab
Thallium, Total Recoverable	mg/L	*		*	once/year*****	grab
Total Organic Carbon	mg/L	*		*	once/year*****	grab
Vanadium, Total Recoverable	mg/L	*		*	once/year*****	grab
Oil & Grease	mg/L	15		10	once/year*****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2003</u> .						
<u>Outfall #003 (Note 1)</u>						
Flow	MGD	*		*	once/day	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		65	45	once/day	grab
Total Suspended Solids	mg/L		110	70	once/day	grab
pH - Units	SU	****		****	once/day	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>December 28, 2002</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Sample once per quarter during the months of March, May, September, and November.
- *** Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.
- **** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- ***** The discharge shall not exceed the appropriate values in Table B 10 CSR 20, 7.031.
- ***** Samples to be taken in May.

Note 1 - There shall be no discharge from leachate holding basin or the irrigation system. If a discharge does occur, the department shall be notified within 24 hours and the discharge shall be sampled each day that a discharge occurs. Report as "no-discharge" when a discharge does not occur during the report period.

C. SPECIAL CONDITIONS

1. Report as no-discharge when a discharge does not occur during the report period.
2. All design and operating specifications and all Waste Management Program approval conditions pertaining to water quality are hereby made a part of this permit and apply throughout the life of this permit without regard to other conditions, permits, occurrences, etc.
3. This permit does not allow the discharge of storm water that has contacted the open face of the landfill. This permit does not allow the discharge of untreated leachate. All leachate shall be handled in accordance with the Solid Waste Disposal Area Operating Permit, Report of Approval of Plans and Specifications (with conditions).

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. All activities performed to control erosion on the landfill site (seeding, mulching, terracing, etc.) shall be described and submitted along with the second quarter and fourth quarter Discharge Monitoring Reports. If no erosion controls are undertaken, indicate so on the reports.
 6. All outfalls must be clearly marked in the field.

C. SPECIAL CONDITIONS (continued)

7. This permit may be reopened and modified, or alternatively revoked and reissued, to:
- (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

8. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

D. SPECIAL CONDITIONS FOR OUTFALL #003

- 1. Wastewater irrigation rates shall be in accordance with 10 CSR 20-8.020 subsection (15)(F)6, and shall not exceed 1.0 inches/acre per day, and 3.0 inches/acre per week. The hourly irrigation rate shall not exceed the soil permeability rate at the time of irrigation. Annual application rates shall not exceed 12 inches per acre.
- 2. Lagoons and storage basins shall be operated so that the maximum water elevation does not exceed one foot below the overflow point except due to the rainfall exceptions in this permit. The minimum operating water level shall be clearly marked and lagoons/storage basins shall be lowered to this minimum level prior to each winter. The recommended target date for achieving the minimum level is November 1.

D. SPECIAL CONDITIONS FOR OUTFALL #003 (continued)

3. Wastewater irrigation equipment shall be properly operated and maintained and shall be visually checked daily during irrigation.
4. The wastewater irrigation site shall be well vegetated during the application periods.
5. Land application shall not occur during freezing conditions or when soil is saturated.
6. Wastewater and sludge bio-solids shall not be applied to public use areas.
7. Leachate may only be applied over landfill areas that have leachate collection systems.
8. All Solid Waste Management Program requirements on land application of leachate are hereby made part of this permit.
9. Monitoring and Reporting Requirements

The permittee shall maintain operating records on file at the facility for at least five years for the following: daily rainfall received, dates and amounts of irrigation or sludge biosolids applications for each land application site or equipment setting, dates when the facility is checked for proper operation, monthly water level in the lagoon or storage basin, dates when a wastewater discharge occurs from the lagoon/storage basin or land application site, records of maintenance and repairs, and description of any unusual operating conditions encountered.

A summary of the operating records shall be submitted with the application for renewal of the general permit. If wastewater has not been land applied during the previous three years, the application for renewal shall include a water balance in accordance with 10 CSR 20-8.020(16) to show that any earthen lagoons or storage basins are sealed or shall submit other data showing that wastewater is not being discharged to surface or subsurface waters.